## **Lesson Plan 3**

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#### **Overview**

The purpose of these activities is to introduce students to the definitions and concepts of the census of agriculture; to test their knowledge of the geographic location of selected States; and to familiarize them with the geography of the Nation's map by showing major areas where different crops and livestock are located.

Students will learn the definitions to concepts and words that are associated with the census of agriculture. They reinforce these concepts by engaging in activities such as a word search using census words. The students will also use examples of dot maps from the 1987 Agricultural Atlas of the United States (located in the appendix) to see the location of major crops and livestock.

- Suggested grades 6-8
- Suggested time 3 days

### **Learning Objectives**

Students will:

1. Define many terms that are used in the census of agricul-

ture, and become more familiar with them through word association and a word search

- Use some census data to analyze trends and to improve their mathematical skills
- Test their knowledge of the geographic location of selected States
- 4. Become more familiar with the U.S. map and where different crops and livestock are located by viewing dot maps which are taken from the 1987 Agricultural Atlas of the United States

### **Vocabulary**

(See Glossary of Census Terms in the Introduction for definitions)

Census
Census region
Geography
Crop year covered
Atlas
Irrigation
Rural
Survey
Farm/ranch

### **Materials Needed**

Copies of Activity 1, Activity 2, and Activity 3 Handouts

From the Appendix: Copies of "Table 1. Historical Highlights: 1987 and Earlier Census Years;" the "Sugarcane for Sugar: 1987," "Acres of Oranges: 1987," and "Acres of Grapefruit: 1987" dot maps; "Table 1. Number of Farms: 1987 and 1982" and "Table 3. Total Cropland: 1987 and 1982"

### **Getting Started**

- 1. Introduce this lesson by having a discussion of the vocabulary words. Tell the students they are going to be learning some important words that relate to the census of agriculture. Begin with the word CENSUS. Ask them if they know the meaning of the word. Discuss the rest of the vocabulary words. (Refer to the Glossary of Census Terms for definitions.)
- Have the students complete the Activity 1 Handout to help familiarize them with census words.
- 3. Ask the students to guess the approximate number of hogs

and pigs that were sold in 1987 (Answer 96,569,359). Award a prize for the student who comes the closest. Discuss how difficult it is to "guess" these facts and the importance of accurate data. Also discuss how census data relate to agricultural operations in the local community.

ANSWER: It is almost impossible to "guess" facts regarding the census of agriculture. The census of agriculture is

compiled from millions of reports by America's farmers and ranchers. All farmers and ranchers are asked to respond; however, some may not realize how valuable their data can be in planning for agricultural production programs or agribusiness development.

Federal, State, and local governments use the census of agriculture data to analyze

and develop policy on land use, irrigation needs, rural development, and farmland assessment.

Congress is not able to support farmers with aid and agribusinesses cannot determine the most effective locations for retail outlets. Congress and Federal agencies cannot draft legislation and planning programs that affect agriculture, etc.



## **Word Search**

Find the words listed below in the word search puzzle. Circle each word that you are able to find. Words may be found forward and backward (horizontally, vertically, and diagonally).

Census	Fulltime	Rural
Census region	Atlas	Irrigation
Geography	Tenants	Farm
Survey	Parttime	Ranch
Ranking	Operator	Cropland
Acre	Increase	Decrease

### **WORD SEARCH PUZZLE**

d	е	С	r	е	а	S	е	t	а	У	n	d	S	t	i
r	h	p	е	0	X	•	m	f	Ī	h	0	n	٧	Z	n
d	g	С	е	n	S	u	S	a	m	р	j	а	f		С
k	d	p	n	W	S	f	r	i	j	а	t		a	S	r
X	m	k	W	а	u	u	У	р	٧	r	а	р	r	0	е
p	g	S	i	u	r	1	S	а	į	g	g	0	m	р	а
X	m	р	S		V	ı	k	r	j	0	i	r	h	е	S
S	t	n	а	n	е	t	i	t	е	е	r	C	а	r	е
٧	k		m	r	y	i	W	t	X			n	j	a	0
q	f	Z	С	b	У	m	1	i	f	С	i	W	h	t	m
d	q	а	р	Χ	m	е	Z	m	r	y	k	0	b	0	t
r	а	n	k	i	n	g	X	е	u	f	С	m	n	r	j

### Lesson Plan 3 Activity 2 - Handout



# **Using Census Data**

This exercise will give you experience in using tables and maps from census of agriculture publications. Refer to the specified table or map to answer the questions below.

Use "Table 1. Historical Highlights: 1987 and Earlier Census Years" to answer questions 1 - 7.

- 1. How many acres were irrigated in 1987?
- 2. The number of beef cows decreased from 1982 to 1987 by how much?
- 3. Was there an increase or decrease in broilers and other meat-type chickens sold between 1982 and 1987? What could be the reason for this change?
- 4. The average age of an operator increased by how many years since 1954?
- 5. Farms by value of sales less than \$2,500 increased or decreased by how much between census years 1982 and 1987?
- 6. Farms by value of sales of \$500,000 or more increased or decreased by how much between census years 1982 and 1987?
- 7. The number of farms decreased by 153,217 over the last two census periods. How can farmers still produce enough food for an increasing population?

Use the "Sugarcane for Sugar: 1987" map to answer question 8.

8. Which States produce sugarcane for sugar?

# Use the "Acres of Oranges: 1987" and the "Acres of Grapefruit: 1987" maps to answer question 9.

9. Which States produce oranges and grapefruit? Why?

### Use "Table 1. Number of Farms: 1987 and 1982" to answer questions 10 - 11.

- 10. What are the top 5 leading States, and how many farms did they have in 1987 and in 1982?
- 11. Refer to question 10. Of the 5 leading States, which State had the greatest decrease in number of farms? By how much?

## Use "Table 3. Total Cropland: 1987 and 1982" to answer question 12.

12. Using Table 3. Total Cropland: 1987 and 1982 from the "Ranking of States and Counties," which two States changed their ranks between 1982 and 1987?

### Lesson Plan 3 Activity 3 - Handout



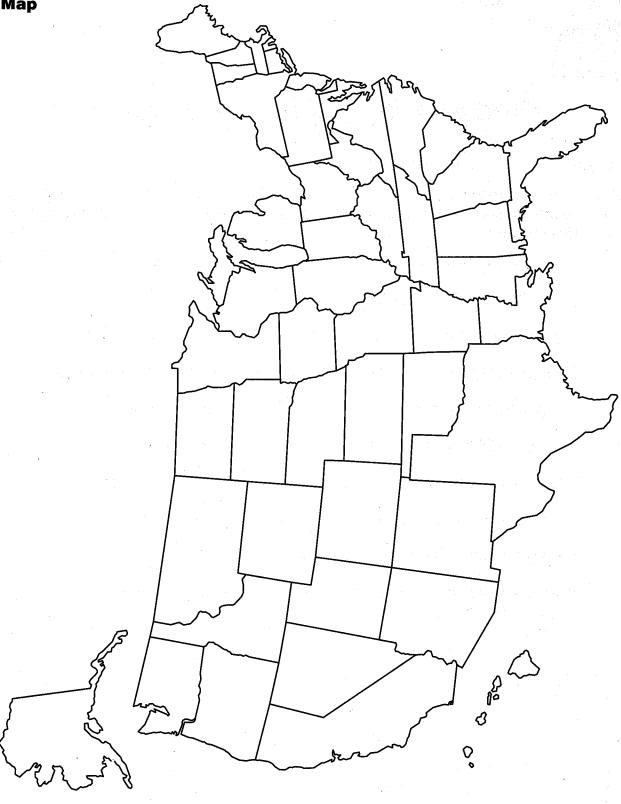
# **Geography - Find the State**

### Do you know the location of the 50 States?

The statements below highlight agriculture data for individual States. After reading the statements, find the States on the U.S. map and mark them with the appropriate State abbreviations.

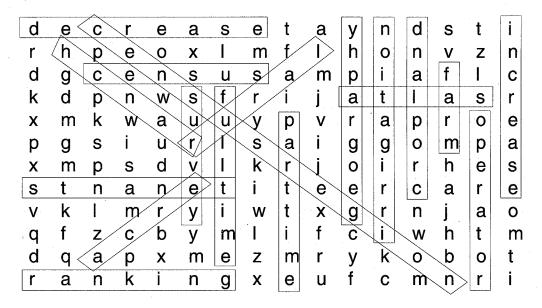
- 1. Wisconsin (WI) has the most milk production in the United States.
- 2. Texas (TX) has the most cattle and calves in the United States.
- 3. Illinois (IL) spends the most on commercial fertilizer in the United States.
- 4. North Carolina (NC) has the largest inventory of turkeys in the United States.
- 5. Georgia (GA) farmers harvest the most peanuts in the United States.
- 6. Arkansas (AR) farmers harvest the most rice in the United States.
- 7. Idaho (ID) farmers harvest the most Irish potatoes in the United States.
- 8. California (CA) had the most land in orchards in the United States.
- 9. Washington (WA) is the number one apple producing State.
- 10. <u>Kansas</u> (**KS**) farmers harvest the most sorghum for grain or seed in the United States.

Lesson Plan 3 Map



### Lesson Plan 3 Activity 1 Answer Sheet

## **Word Search**



### Lesson Plan 3 Activity 2 Answer Sheet

- 1. 46,386,201
- 2. 2,550,014
- 3. Increase, people are becoming more health conscious and eating more poultry instead of beef.
- 4. 2.4
- 5. Decreased 46,031
- 6. Increased 4,223
- 7. The average size of farm has increased from 440 acres in 1982 to 462 acres in 1987. The number of farms is decreasing, but the average size of farm is increasing.
- 8. Louisiana, Florida, Hawaii, Texas
- 9. California, Florida, Arizona, Texas

	1987	1982
Texas	188,788	185,020
Missouri	106,105	112,447
Iowa	105,180	115,413
Kentucky	92,453	101,642
Illinois	88,786	98,483
	Missouri Iowa Kentucky	Missouri 106,105 lowa 105,180 Kentucky 92,453

- 11. lowa, 10,233
- 12. Colorado, California